

CURRENT STATUS OF CLAIMS WITH CLAIM AMENDMENTS

1. (Currently amended) A method of identifying an effective agent that dissociates nuclear hormone receptor activities, comprising the steps of:

(a) contacting a nuclear hormone receptor with one or more agents under conditions suitable for forming a test complex comprising nuclear hormone receptor dimer, coactivator and corepressor;

(b) assaying for coactivator association [with] in said test complex; and

(c) assaying for corepressor association [with] in said test complex,

wherein when said nuclear hormone receptor is a retinoic acid receptor, said corepressor association is increased as compared to corepressor association in a TNPB control complex and

wherein coactivator association combined with corepressor association indicates that at least one of said agents is an effective agent that dissociates nuclear hormone receptor activities.

2. **(Currently amended)** A method of identifying an effective agent that dissociates nuclear hormone receptor activities, comprising the steps of:

(a) contacting a nuclear hormone receptor with one or more agents under conditions suitable for forming a ternary complex comprising nuclear hormone receptor dimer, bound cognate response element, coactivator and corepressor;

(b) assaying for coactivator association **[with]** in said ternary complex; and

(c) assaying for corepressor association **[with]** in said ternary complex,

wherein coactivator association combined with corepressor association indicates that at least one of said agents is an effective agent that dissociates nuclear hormone receptor activities.

3. (Original) The method of claim 1, wherein said contacting is performed *in vitro*.

4. (Original) The method of claim 1, wherein said nuclear hormone receptor is contacted with said one or more agents in the presence of a eukaryotic cell sample.

5. (Original) The method of claim 4, wherein said eukaryotic cell sample comprises viable cells.

6. (Original) The method of claim 4, wherein said eukaryotic cell sample comprises a whole cell lysate.

7. (Original) The method of claim 4, wherein said eukaryotic cell sample comprises a fractionated cell lysate.

8. (Original) The method of claim 4, wherein said eukaryotic cell sample comprises an exogenous nucleic acid molecule encoding said nuclear hormone receptor.

9. (Original) The method of claim 4, wherein said coactivator is endogenous to said cell.

10. (Original) The method of claim 4, wherein said corepressor is endogenous to said cell.

11. **(Currently amended)** A method of identifying an effective agent that dissociates nuclear hormone receptor activities, comprising the steps of:

(a) contacting a nuclear hormone receptor with one or more agents under conditions suitable for forming a test complex comprising nuclear hormone receptor dimer, coactivator and corepressor,

wherein said nuclear hormone receptor is selected from the group consisting of a retinoic acid receptor, retinoid X receptor, thyroid receptor, estrogen receptor and peroxisome proliferator activated receptor;

(b) assaying for coactivator association [with] in said test complex; and

(c) assaying for corepressor association [with] in said test complex, wherein when said nuclear hormone receptor is a retinoic acid receptor, said corepressor association is increased as compared to corepressor association in a TTNPB control complex and

wherein coactivator association combined with corepressor association indicates that at least one of said agents is an effective agent that dissociates nuclear hormone receptor activities.

12. (Original) The method of claim 11, wherein said nuclear hormone receptor is selected from the group consisting of RAR α , RAR β , RAR γ , RXR α , RXR β and RXR γ .

13. (Original) The method of claim 12, wherein said nuclear hormone receptor is a retinoic acid receptor selected from the group consisting of RAR α , RAR β and RAR γ .

Inventor: Klein et al.
Serial No.: 09/814,604
Filed: March 22, 2001
Page 6

14. (Original) The method of claim 1, wherein said coactivator is selected from the group consisting of

SRC-1/NCoA-1;
TIF-2/GRIP-1/NCoA-2;
ACTR/p/CIP/AIB1/NCoA-3;
p300/CBP;
p/CAF; and
TATA box binding protein.

15. (Original) The method of claim 14, wherein said coactivator is SRC-1/NCoA-1.

16. (Original) The method of claim 1, wherein said corepressor is selected from the group consisting of N-CoR and SMRT.

17. (Original) The method of claim 16, wherein said corepressor is N-CoR.

18. **(Currently amended)** A method of identifying an effective agent that dissociates nuclear hormone receptor activities, comprising the steps of:

(a) contacting a nuclear hormone receptor with one or more agents under conditions suitable for forming a test complex comprising nuclear hormone receptor dimer, coactivator and corepressor;

(b) assaying for coactivator association **[with] in** said test complex, wherein said coactivator is selected from the group consisting of SRC-1/NCoA-1, TIF-2/GRIP-1/NCoA-2, ACTR/p/CIP/AIB1/NCoA-3, p300/CBP, p/CAF, and TATA box binding protein (TBP); and

(c) assaying for corepressor association **[with] in** said test complex, wherein said corepressor is selected from the group consisting of N-CoR and SMRT, **wherein when said nuclear hormone receptor is a retinoic acid receptor, said corepressor association is increased as compared to corepressor association in a TTNPB control complex and**

wherein coactivator association combined with corepressor association indicates that at least one of said agents is an effective agent that dissociates nuclear hormone receptor activities.

19. (Original) The method of claim 1, wherein step (b) comprises specific binding to said test complex.

20. (Original) The method of claim 19, wherein step (b) comprises immunoprecipitation of said test complex.

21. (Original) The method of claim 20, wherein said immunoprecipitation is performed using antibody immunoreactive with said nuclear hormone receptor dimer.

22. (Original) The method of claim 19, wherein step (b) comprises immunodetection of said coactivator.

23. (Original) The method of claim 1, wherein step (c) comprises specific binding to said test complex.

24. (Original) The method of claim 23, wherein step (c) comprises immunoprecipitation of said test complex.

25. (Original) The method of claim 24, wherein said immunoprecipitation is performed using antibody immunoreactive with said nuclear hormone receptor dimer.

26. (Original) The method of claim 23, wherein step (c) comprises immunodetection of said corepressor.